

WHAT IS CLAIMED IS:

1. An integrated security and communications system comprising:

5 a security controller having at least one sensory input, at least one alarm output and at least one control signal input/output port;

a control interface operatively connected to said at least one control signal input/output port;

10 a communications unit connected to a communication channel for providing at least one communication function, and a first communication port for connection to one of said at least one control signal input/output port of said security controller  
15 for providing at least one of said at least one communication function to a user at said control interface.

2. The system of claim 1 wherein:

said communication channel comprises a telephone line; and

said at least one communication function  
5 comprises voice mail.

3. A security system for monitoring user premises, said system comprising:

at least one sensor;

at least one alarm output device;

5 at least one user control interface;

a system controller connected to said sensor, said output device and said user control interface, said at least one user control interface being used by a user to enter commands affecting a  
10 state of said system, said system, when said state indicates that said system is active, monitoring said at least one sensor and outputting an alarm on said

alarm output device when said at least one sensor indicates that an alarm condition exists; and

- 15           a telephone interface unit connected to said controller and a telephone line for providing voice mail functionality, said voice mail functionality being accessible at at least one of said at least one user control interface.

4.   The security system of claim 3 wherein:  
          said voice mail functionality includes one or more of message retrieval, message waiting indication, and message header indication; and

- 5           access to said voice mail functionality is restricted based on said state of said system.

5.   The security system of claim 4 wherein  
          said voice mail functionality is accessible when said state is consistent with presence of an authorized user on said premises.

6.   The security system of claim 5 having a plurality of authorized users, wherein:

- a particular authorized user initiates said state consistent with presence of an authorized  
15   user by presenting at said user control interface an indicium unique to said particular authorized user; and  
          said telephone interface unit presents for access at said user control interface only voice mail functions addressed to said authorized user.

7.   The security system of claim 6 wherein:  
          said user control interface comprises a keypad;

- said indicium comprises a passcode; and  
5        said presentation of said indicium comprises entry of said passcode at said keypad.

8. The security system of claim 4 wherein  
said voice mail functionality is activated  
automatically upon entry of said system into said state  
consistent with presence of an authorized user on said  
5 premises.

9. The security system of claim 3 further  
comprising at least one telephone set connected to said  
telephone line; wherein:

5 said telephone interface unit further  
provides a call screening function at at least one of  
(a) said at least one telephone set, and (b) said at  
least one user control interface.

10. The security system of claim 9 wherein  
said call screening function comprises an ability to  
answer a call being screened.

11. The security system of claim 9 wherein:  
said user control interface includes a  
speaker;

5 said voice mail functionality comprises  
playback of an outgoing message to an incoming caller;  
and

said call screening function is full-  
duplex, allowing said incoming caller to speak an  
announcement that is audible at said speaker during  
10 said playback of said outgoing message.

12. The security system of claim 3 further  
comprising at least one telephone set connected to said  
telephone line, said least one telephone set having a  
ringer; wherein:

5           said telephone interface unit further  
provides a privacy function whereby said ringer can be  
deactivated under control of a user.

13. The security system of claim 3 wherein  
said telephone interface unit further comprises a  
calling party identification unit for displaying  
calling party identification data, said calling party  
5 identification data being displayed at said user  
control interface.

14. The security system of claim 13 wherein:  
said user control interface includes a  
speaker; and  
said telephone interface unit further  
5 comprises a voice synthesis unit for announcing said  
calling party identification data at said speaker.

15. The security system of claim 13 wherein:  
said user control interface includes a  
speaker;  
said telephone interface unit comprises  
5 memory for storing at least one telephone number and  
identifying data associated with said telephone number;  
and  
when said calling party identification  
data identifies said stored telephone number, said  
10 identifying data are announced at said speaker.

16. The security system of claim 15 wherein  
said identifying data comprise stored spoken data.

17. The security system of claim 15 wherein  
said telephone interface unit comprises a voice  
synthesis unit for announcing said identifying data.

18. The security system of claim 3 wherein  
said voice mail functionality is accessible only to an  
authorized user on presentation of an indicium  
indicating authorization to access said voice mail  
5 functionality.

19. The security system of claim 18 wherein  
said indicium indicating authorization to access said  
voice mail functionality also is an indicium  
authorizing access to said security system.

20. The security system of claim 18 wherein  
said indicium indicating authorization to access said  
voice mail functionality is different from an indicium  
authorizing access to said security system.

21. The security system of claim 18 wherein:  
said user control interface comprises a  
keypad;  
said indicium comprises a passcode; and  
5 said presentation of said indicium  
comprises entry of said passcode at said keypad.

22. The security system of claim 3 wherein:  
said voice mail functionality comprises  
a plurality of voice mailboxes;  
said telephone interface unit comprises  
5 a calling party identification unit generating calling  
party identification data; and  
incoming calls are directed  
automatically to one of said plurality of voice  
mailboxes based on said calling party identification  
10 data.

23. The security system of claim 3 wherein:

said voice mail functionality comprises a plurality of outgoing greeting messages for playback to incoming callers;

5               said telephone interface unit comprises a calling party identification unit generating calling party identification data; and

                    said telephone interface unit selects one outgoing greeting message of said plurality of  
10 outgoing greeting messages is for playback based on said calling party identification data.

24. The security system of claim 3 further comprising at least one telephone set connected to said telephone line through said telephone interface unit; wherein:

5               said telephone interface unit further comprises an auto-redial function; whereby, when a user dials a number using said connected telephone set and said dialed number is busy:

                    said telephone interface unit  
10 automatically redials said dialed number at predetermined intervals for up to a predetermined duration;

                    when said telephone interface unit detects a ringing signal as a result of redialing said  
15 dialed number, said telephone interface unit generates an indicium for annunciation at said user control interface to signal said user to engage said connected telephone set.

25. An integrated security and communications method comprising:

                    providing a security controller having at least one sensory input, at least one alarm output  
5 and at least one control signal input/output port;

providing a control interface  
operatively connected to said at least one control  
signal input/output port;

providing a communications unit  
10 connected to a communication channel for providing at  
least one communication function; and  
providing at least one of said at least  
one communication function to a user at said control  
interface by providing a first communication port for  
15 connection to one of said at least one control signal  
input/output port of said security controller.

26. The method of claim 25 wherein:  
said communication channel comprises a  
telephone line; and  
said at least one communication function  
5 comprises voice mail.

27. A method for monitoring user premises,  
said method comprising:  
providing at least one sensor;  
providing at least one alarm output  
5 device;  
providing at least one user control  
interface;  
providing a system controller connected  
to said sensor, said output device and said user  
10 control interface;  
providing a telephone interface unit  
connected to said controller and a telephone line for  
providing voice mail functionality;  
accepting at said at least one user  
15 control interface commands entered by a user to affect  
a state of said system controller;  
when said state indicates that said  
system controller is active, monitoring said at least

one sensor and outputting an alarm on said alarm output  
20 device when said at least one sensor indicates that an  
alarm condition exists; and  
accessing said voice mail functionality  
at least one of said at least one user control  
interface.

28. The method of claim 27 wherein:  
said voice mail functionality includes  
one or more of message retrieval, message waiting  
indication, and message header indication; said method  
5 further comprising:  
restricting access to said voice mail  
functionality based on said state of said system  
controller.

29. The method of claim 28 wherein said  
voice mail functionality is accessible when said state  
is consistent with presence of an authorized user on  
said premises.

30. The method of claim 29, wherein:  
there are a plurality of authorized  
users; and  
a particular authorized user initiates  
5 said state consistent with presence of an authorized  
user by presenting at said user control interface an  
indicium unique to said particular authorized user;  
said method further comprising:  
presenting for access at said user  
10 control interface only voice mail functions addressed  
to said authorized user.

31. The method of claim 30 further  
comprising:



providing a keypad at said user control interface; wherein:

- 5           said indicium comprises a passcode; and  
          said presentation of said indicium  
comprises entry of said passcode at said keypad.

32. The method of claim 28 further  
comprising activating said voice mail functionality  
automatically upon entry of said system into said state  
consistent with presence of an authorized user on said  
5 premises.

33. The method of claim 27 wherein:  
          at least one telephone set is connected  
to said telephone line; said method further comprising:  
          providing a call screening function at  
5 at least one of (a) said at least one telephone set,  
and (b) said at least one user control interface.

34. The method of claim 33 wherein said call  
screening function comprises an ability to answer a  
call being screened.

35. The method of claim 33 wherein:  
          said user control interface includes a  
speaker;  
          said voice mail functionality comprises  
5 playback of an outgoing message to an incoming caller;  
and

          said call screening function is full-  
duplex, allowing said incoming caller to speak an  
announcement that is audible at said speaker during  
10 said playback of said outgoing message.

36. The method of claim 27 wherein:

at least one telephone set is connected to said telephone line, said least one telephone set having a ringer; said method further comprising:  
5 providing a privacy function whereby said ringer can be deactivated under control of a user.

37. The method of claim 27 wherein:  
said telephone interface unit further comprises a calling party identification unit for displaying calling party identification data; said  
5 method further comprising:  
displaying said calling party identification data at said user control interface.

38. The method of claim 37 wherein:  
said user control interface includes a speaker; and  
said telephone interface unit further  
5 comprises a voice synthesis unit; said method further comprising:  
synthesizing said calling party identification data and announcing said calling party identification data at said speaker.

39. The method of claim 37 wherein:  
said user control interface includes a speaker; said method further comprising:  
storing at least one telephone number  
5 and identifying data associated with said telephone number at said telephone interface unit; and  
when said calling party identification data identifies said stored telephone number, announcing said identifying data at said speaker.

40. The method of claim 39 wherein said identifying data comprise stored spoken data.

41. The method of claim 39 wherein:  
said telephone interface unit comprises  
a voice synthesis unit; said method further comprising:  
synthesizing and announcing said  
5 identifying data.

42. The method of claim 27 wherein said  
voice mail functionality is accessible only to an  
authorized user on presentation of an indicium  
indicating authorization to access said voice mail  
5 functionality.

43. The method of claim 42 wherein said  
indiciu indicating authorization to access said voice  
mail functionality also is an indicium authorizing  
access to said security system.

44. The method of claim 42 wherein said  
indiciu indicating authorization to access said voice  
mail functionality is different from an indicium  
authorizing access to said security system.

45. The method of claim 42 further  
comprising:  
providing a keypad at said user control  
interface; wherein:  
5 said indicium comprises a passcode; and  
said presentation of said indicium  
comprises entry of said passcode at said keypad.

46. The method of claim 27 wherein:  
said voice mail functionality comprises  
a plurality of voice mailboxes; and  
said telephone interface unit comprises  
5 a calling party identification unit generating calling

party identification data; said method further comprising

directing incoming calls automatically to one of said plurality of voice mailboxes based on  
10 said calling party identification data.

47. The method of claim 27 wherein:

said voice mail functionality comprises a plurality of outgoing greeting messages for playback to incoming callers; and

5 said telephone interface unit comprises a calling party identification unit generating calling party identification data; said method further comprising:

selecting one outgoing greeting message  
10 of said plurality of outgoing greeting messages for playback based on said calling party identification data.

48. The method of claim 27 wherein:

at least one telephone set is connected to said telephone line through said telephone interface unit and said telephone interface unit further

5 comprises an auto-redial function; said method further comprising:

when a user dials a number using said connected telephone set and said dialed number is busy, automatically redialing said dialed number at  
10 predetermined intervals for up to a predetermined duration; and

when said telephone interface unit detects a ringing signal as a result of redialing said dialed number, generating an indicium for annunciation  
15 at said user control interface to signal said user to engage said connected telephone set.

49. An integrated security and communications system comprising:

- security controller means having at least one means for accepting sensory input, at least one means for outputting an alarm and at least one control signal input/output port;
- control interface means operatively connected to said at least one control signal input/output port;
- means connected to a communication channel for providing at least one communication function, and a first communication port for connection to one of said at least one control signal input/output port of said security controller means for providing at least one of said at least one communication function to a user at said control interface means.

50. The system of claim 49 wherein:

- said communication channel comprises a telephone line; and
- said at least one communication function comprises voice mail.

51. A security system for monitoring user premises, said system comprising:

- at least one means for sensing;
- at least one means for outputting an alarm;
- at least one user control interface means;
- system controller means connected to said means for sensing, said means for outputting an alarm and said user control interface means, said at least one user control interface means being used by a user to enter commands affecting a state of said system, said system, when said state indicates that

said system is active, monitoring said at least one  
15 means for sensing and outputting an alarm on said means  
for outputting an alarm when said at least one means  
for sensing indicates that an alarm condition exists;  
and

a telephone interface means connected to  
20 said controller means and a telephone line for  
providing voice mail functionality, said voice mail  
functionality being accessible at at least one of said  
at least one user control interface means.

52. The security system of claim 51 wherein:  
said voice mail functionality includes  
one or more of message retrieval, message waiting  
indication, and message header indication; and  
5 access to said voice mail functionality  
is restricted based on said state of said system.

53. The security system of claim 53 wherein  
said voice mail functionality is accessible when said  
state is consistent with presence of an authorized user  
on said premises.

54. The security system of claim 54 having a  
plurality of authorized users, wherein:  
a particular authorized user initiates  
said state consistent with presence of an authorized  
5 user by presenting at said user control interface means  
an indicium unique to said particular authorized user;  
and  
said telephone interface means presents  
for access at said user control interface means only  
10 voice mail functions addressed to said authorized user.

55. The security system of claim 55 wherein:

said user control interface means  
comprises keypad means;

5           said indicium comprises a passcode; and  
          said presentation of said indicium  
comprises entry of said passcode at said keypad means.

56. The security system of claim 53 wherein  
said voice mail functionality is activated  
automatically upon entry of said system into said state  
consistent with presence of an authorized user on said  
5 premises.

57. The security system of claim 51 further  
comprising at least one telephone set connected to said  
telephone line; wherein:

          said telephone interface means further  
5 provides a call screening function at at least one of  
(a) said at least one telephone set, and (b) said at  
least one user control interface means.

58. The security system of claim 58 wherein  
said call screening function comprises an ability to  
answer a call being screened.

59. The security system of claim 58 wherein:  
said user control interface means  
includes speaker means;

          said voice mail functionality comprises  
5 playback of an outgoing message to an incoming caller;  
and

          said call screening function is full-  
duplex, allowing said incoming caller to speak an  
announcement that is audible at said speaker means  
10 during said playback of said outgoing message.

60. The security system of claim 51 further comprising at least one telephone set connected to said telephone line, said least one telephone set having means for ringing; wherein:

5       said telephone interface means further provides a privacy function whereby said means for ringing can be deactivated under control of a user.

61. The security system of claim 51 wherein said telephone interface means further comprises a means for displaying calling party identification data, said calling party identification data being displayed  
5   at said user control interface means.

62. The security system of claim 62 wherein:  
      said user control interface means includes speaker means; and  
      said telephone interface means further  
5   comprises means for synthesizing voice for announcing said calling party identification data at said speaker means.

63. The security system of claim 62 wherein:  
      said user control interface means includes speaker means;  
      said telephone interface means comprises  
5   means for storing at least one telephone number and identifying data associated with said telephone number; and  
      when said calling party identification data identifies said stored telephone number, said  
10   identifying data are announced at said speaker means.

64. The security system of claim 64 wherein said identifying data comprise stored spoken data.



65. The security system of claim 64 wherein said telephone interface means comprises means for synthesizing voice for announcing said identifying data.

66. The security system of claim 51 wherein said voice mail functionality is accessible only to an authorized user on presentation of an indicium indicating authorization to access said voice mail  
5 functionality.

67. The security system of claim 67 wherein said indicium indicating authorization to access said voice mail functionality also is an indicium authorizing access to said security system.

68. The security system of claim 67 wherein said indicium indicating authorization to access said voice mail functionality is different from an indicium authorizing access to said security system.

69. The security system of claim 67 wherein:  
said user control interface means  
comprises keypad means;  
said indicium comprises a passcode; and  
5 said presentation of said indicium  
comprises entry of said passcode at said keypad means.

70. The security system of claim 51 wherein:  
said voice mail functionality comprises  
a plurality of voice mailboxes;  
said telephone interface means comprises  
5 calling party identification means generating calling  
party identification data; and  
incoming calls are directed  
automatically to one of said plurality of voice

mailboxes based on said calling party identification  
10 data.

71. The security system of claim 51 wherein:  
said voice mail functionality comprises  
a plurality of outgoing greeting messages for playback  
to incoming callers;

5 said telephone interface means comprises  
means for generating calling party identification data;  
and

said telephone interface means selects  
one outgoing greeting message of said plurality of  
10 outgoing greeting messages is for playback based on  
said calling party identification data.

72. The security system of claim 51 further  
comprising at least one telephone set connected to said  
telephone line through said telephone interface means;  
wherein:

5 said telephone interface means further  
comprises an auto-redial function; whereby, when a user  
dials a number using said connected telephone set and  
said dialed number is busy:

said telephone interface means  
10 automatically redials said dialed number at  
predetermined intervals for up to a predetermined  
duration;

when said telephone interface means  
detects a ringing signal as a result of redialing said  
15 dialed number, said telephone interface means generates  
an indicium for annunciation at said user control  
interface means to signal said user to engage said  
connected telephone set.